

**BIOGRAPHICAL SKETCH**

| NAME<br>Jason R. Pirone   | POSITION TITLE<br>Toxicologist |           |   |
|---|--------------------------------|-----------|---|
| eRA COMMONS USER NAME   |                                |           |   |
| EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> ) |                                |           |   |
| INSTITUTION AND LOCATION  | DEGREE<br>(if applicable)      | YEAR(s)   | FIELD OF STUDY                              |
| University of Massachusetts Amherst   | B.S.                           | 1988-1993 | Environmental Science                       |
| University of Massachusetts Amherst   | B.A.                           | 1988-1993 | Chemistry                                   |
| University of Chicago   | M.S.                           | 1994-1996 | Chemistry                                   |
| North Carolina State University, Raleigh, NC  | Ph.D.                          | 1998-2004 | Biomathematics and<br>Toxicology (co-major) |
| University of North Carolina, Chapel Hill, NC   | Postdoc                        | 2004-2005 | Biostatistics                               |
| National Center for Computational Toxicology, US<br>EPA, RTP, NC  | Postdoc                        | 2008-     | Computational<br>Toxicology                 |

**A. POSITIONS and HONORS****Research and Professional Experience:**

|              |   |
|--------------|---|
| 2008-Present | Postdoctoral Fellow, National Center for Computational Toxicology, US EPA, RTP, NC (Mentor: Imran Shah)   |
| 2006-2008    | Visiting Assistant Professor, Department of Public Health, Division of Biostatistics and Epidemiology, University of Massachusetts, Amherst, MA |
| 2005-2008    | Senior Biomathematician, Constella Group, Durham, NC  |
| 2004-2005    | Postdoctoral Fellow, Department of Biostatistics, School of Public Health, University of North Carolina, Chapel Hill, NC                        |
| 2000-2004    | Research Assistant, Program in Biomathematics, Department of Statistics, North Carolina State University, Raleigh, NC                           |
| 1998-2000    | Research Assistant, Department of Environmental and Molecular Toxicology, North Carolina State University, Raleigh, NC                          |

**Honors and Awards:**

|      |  |
|------|--|
| 2007 | Outstanding Teaching Award Nominee, School of Public Health, UMass Amherst.  |
| 2004 | Lucas Research Award, Biomathematics Program.  |
| 2004 | National Cancer Institute Trainee in Cancer and Genomics.  |
| 2004 | Invited Speaker, Biomedical Engineering Society Annual Meeting, Philadelphia, PA.                                      |
| 2000 | Biomathematics Program Student Representative to Gordon Research Conference on Theoretical Biology and Biomathematics. |
| 1998 | Phi Kappa Phi Honor Society, Elected as Department of Environmental and Molecular Toxicology Representative.           |
| 1993 | <i>cum laude</i> graduate, University of Massachusetts Amherst.  |

**Teaching Experience**

|             |   |
|-------------|---|
| Spring 2007 | Course Developer and Instructor, <i>Mathematical Modeling in Toxicology and Environmental Health</i> , PUBHLTH 690D, Program in Biostatistics, Department of Public Health, University of Massachusetts Amherst |
| Spring 2007 | Course Developer and Instructor, <i>Intermediate Biostatistics</i> , PUBHLTH 640, Program in Biostatistics, Department of Public Health, University of Massachusetts Amherst                                    |

Fall 2006, 2007 Instructor, *Introductory Biostatistics*, PUBHLTH 540, Program in Biostatistics, Department of Public Health, University of Massachusetts Amherst  
Spring 2002 Teaching Assistant, *Biological Modeling*, Program in Biomathematics, North Carolina State University, Raleigh, NC  
1997-1998 Laboratory Instructor, *General Chemistry*, North Carolina State University, Raleigh, NC  
1994-1995 Laboratory Instructor, *Organic Chemistry*, University of Chicago

## B. SELECTED PUBLICATIONS.

Pirone JR and Elston TC. (2004) Fluctuations in transcription factor binding can explain the graded and binary responses observed in inducible gene expression. *J. Theor. Biol.*, 226:111-121.  
Rhyne BN, Pirone JR, and Monteiro-Riviere NA. (2002) The use of enzyme histochemistry in detecting cutaneous toxicity of three topically applied jet fuel mixtures. *Toxicol. Methods*, 12: 17-34.

## Submitted and In Preparation

Zhu, H, Ewens, A, Tropsha, A, Crockett, P, Pirone, JR and Moudgal, CJ. Development of statistically-based quantitative structure-toxicity relationship models for predicting acute and sub-acute benchmarks. In preparation. 2008  
Zhu, H, Ewens, A, Tropsha, A, Crockett, P, Pirone, JR, and Moudgal, CJ. Development of statistically-based quantitative structure-toxicity relationship models for predicting sub-chronic benchmarks. In preparation. 2008  
Pirone JR, Easterling ME. Python as a tool for the development of physiologically based pharmacokinetic models. In preparation. 2008  
Pirone, JR and Troester, MA. Differential gene expression detection in observational data sets with control for confounding variables. In preparation. 2008  
Pirone JR and Elston TC. Bistability and the binary response of eukaryotic gene networks. In preparation. 2008  
Zilberberg MD, de Wit M, Pirone JR, and Shorr AF (2007) Growth in adult-prolonged acute mechanical ventilation: implications for health-care delivery. Submitted to *Critical Care Medicine*.

## C. SELECTED PRESENTATIONS WITH ABSTRACTS

Pirone JR, Easterling MR, Lebetkin EH, Sanders JM, and Portier CJ. Physiologically-based toxicokinetic models for a series of brominated diphenyl ethers. Society of Toxicology Annual Meeting, San Diego, March 2006  
Pirone JR. Applications of computational methods in toxicology. NCSU Biomathematics Alumni Seminar. Raleigh, NC, January 2006  
Pirone JR and Elston TC. The Binary Response of Eukaryotic Gene Networks. Biomedical Engineering Society Annual Meeting, Philadelphia, PA, October 2004.  
Pirone JR, Riviere JE. Modeling percutaneous absorption from complex chemical mixtures, Society of Toxicology Annual Meeting, San Francisco, March 2001.  
Pirone JR, Baynes RE, Mumtaz M, Qiao GL, and Riviere JE. Mixture Component Effects on the Absorption of TCB, PCB, and PCP. Society of Toxicology Annual Meeting, Philadelphia, March 2000.

## D. CONTINUING EDUCATION

International Workshop on Physiologically Based Pharmacokinetic/Pharmacodynamic Modeling and Risk Assessment. Colorado State University, 1999. Course Instructors: R. Yang and M. Anderson.